U.S. DEPARTMENT OF ENERGY Office of Electricity Delivery and Energy Reliability

Infrastructure Security and Energy Restoration

ENERGY ASSURANCE DAILY

Wednesday Evening, August 31, 2016

Major Developments

Offshore Gulf of Mexico Oil & Gas Producers Begin Restoring Operations as Threat from Tropical Storm Hermine Lessens; 312,000 b/d of Crude Oil and 360 MMcf/d of Gas **Production Remain Shut-In August 31 – BSEE**

The Bureau of Safety and Environmental Enforcement (BSEE) on Wednesday said that 10 platforms had been evacuated, and estimated that approximately 312,280 b/d of crude oil production, and 360 MMcf/d of natural gas production in the U.S. Gulf of Mexico had been shut-in due to Tropical Storm Hermine. The volume of oil shut-in is down from up from 352,946 b/d on Tuesday, while the volume of gas shut-in is up from 346 MMcf/d on Tuesday. Wednesday's shut in figures represent 19.52 percent of total oil output and 10.59 percent of natural gas production in the U.S. Gulf of Mexico, and is reflective of seven companies' reports as of 12:30 p.m. EDT today. According to the U.S. Energy Information Administration (EIA), the U.S. Gulf of Mexico accounts for about 20 percent of U.S. oil production and around 5 percent of natural gas output. The following bullets list updates to Gulf of Mexico operations, broken out by operator:

- **BP** on Wednesday said production resumed at its Atlantis platform (200,000 b/d oil, 180 MMcf/d gas) after it was shut on Monday. Production remained shut-in at its Thunder Horse (250,000 b/d oil, 200 MMcf/d gas) and the Na Kika (130,000 b/d oil, 500 MMcf/d gas) platforms. BP's other offshore production platform in the deepwater Gulf, Mad Dog, has remained in production. BP said it will continue to monitor offshore conditions to determine when conditions are safe to redeploy non-essential personnel and resume normal operations.
- Shell on Wednesday said it was returning personnel to its offshore assets in the Gulf of Mexico as forecasts show the storms moving away from its operations. Shell said the storm did not affect production at any of its assets and it was in the process of resuming drilling operations that were suspended as a precautionary measure. The Coulomb subsea field, which was shut on Monday, will remain shut in until the associated non-operated production hub, downstream oil and gas gathering systems, and receipt points resume operations.

https://www.bsee.gov/newsroom/latest-news/statements-and-releases/press-releases/bsee-tropical-depression-no-9 http://www.shell.us/media/us-storm-center/shell-us-storm-updates/2016-storm-updates/storm-center-update-3tropical-depression.html

http://www.bp.com/en_us/bp-us/media-room/storm-center.html

Update: Tropical Depression Nine Strengthens to Tropical Storm Hermine: Duke Energy Staging Crews as Landfall Expected on Florida Gulf Coast September 1

Tropical Depression Nine strengthened into Tropical Storm Hermine on Wednesday as it continued its track towards the northwest Florida coast. As of 5:00 p.m. EDT, Hermine was located about 560 miles west-southwest of Tampa, Florida, with maximum sustained winds of 45 miles per hour, according to the National Hurricane Center. Additional strengthening is forecast during the next day or two, and Hermine could be near hurricane strength by the time landfall occurs, which is expected on the afternoon of September 1. Duke Energy Florida said it will stage workers in Florida, the Carolinas, and surrounding states, to allow for the most rapid response and restoration after Tropical Storm Hermine impacts the region. The company said it was closely monitoring the weather system, which could potentially strengthen and bring heavy rainfall, strong winds and localized flooding to portions of the Duke Energy Florida service area. Florida's governor declared an emergency on Wednesday ahead of the storm.

http://www.nhc.noaa.gov

http://www.reuters.com/article/us-storm-hermine-nhc-idUSKCN1162LM

https://news.duke-energy.com/releases/releases-20160830

http://www.flgov.com/2016/08/31/governor-scott-declares-a-state-of-emergency-in-florida-in-preparation-fortropical-depression-nine/

HELCO, USCG Preparing for Impacts from Hurricane Madeline, Lester in Hawaii August 31

Hawaii Electric Light Company (HELCO) said employees were working around the clock in preparation for impacts from Hurricane Madeline, which is expected to impact the Big Island (Hawaii) on September 1. HELCO said its crews were working to lessen an outage impact by securing transformers at the HELCO baseyard near Hilo International Airport. HELCO also said it has worked to clear trees and other vegetation from its main transmission lines, spending about \$14 million since Hurricane Iselle impacted the Big Island in 2014. Meanwhile, the U.S. Coast Guard Port Sector Honolulu closed the Ports of Hilo and Kawaihae on the Big Island late on Tuesday in preparation for gale force winds from Madeline. Elsewhere, ports on the islands of Oahu, Maui, Lanai, and Molokai were open with restrictions. As of 5:00 p.m. EDT, Hurricane Madeline (Category 1) was about 95 miles southeast of Hilo, moving west at about 13 mph with maximum sustained winds near 75 miles per hour (mph). Madeline is forecast to weaken to a tropical storm later on Wednesday, although tropical storm conditions are expected to develop over portions of the Big Island later today and continue into early Thursday. Additionally, tropical storm conditions are expected to develop over Maui by Wednesday. Meanwhile, Hurricane Lester (Category 4) was located about 1,000 miles east of Hilo moving west at about 13 mph. The system was expected to continue this motion during the next 24 hours and track into the Central Pacific basin later this afternoon. Maximum sustained winds were near 130 mph, with hurricane-force winds extending outward up to 35 miles.

https://www.facebook.com/HawaiianElectric

http://khon2.com/2016/08/28/hawaii-island-prepares-for-possible-effects-of-tropical-storm-madeline/

https://homeport.uscg.mil/mycg/portal/ep/portDirectory.do?tabId=1&cotpId=27

http://www.prh.noaa.gov/cphc/tcpages/archive/?prod=TCPCP5.EP142016.022.201608312052

http://www.nhc.noaa.gov/text/refresh/MIATCPEP3+shtml/312036.shtml

Electricity

Update: FPL's 839 MW Saint Lucie Nuclear Unit 1 in Florida Ramps Up to 86 Percent by August 31

On the morning of August 30 the unit was operating at 74 percent after restarting on August 28. The unit was shut on August 21 after it experienced a reactor trip and a loss of offsite power due to an inadvertent generator relay actuation.

http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2016/

http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2016/20160823en.html

AES's 506 MW Redondo Gas-fired Unit 7 in California Shut by August 30

The unit entered an unplanned outage.

http://content.caiso.com/unitstatus/data/unitstatus201608301515.html

Petroleum

Update: PES Restarts Reformer at Its 335,000 b/d Philadelphia, Pennsylvania Refinery August 31 – Sources

Philadelphia Energy Solutions (PES) on Wednesday was restarting a 32,000 b/d reformer unit at the Girard Point Section of its Philadelphia refinery complex, according to two sources familiar with the plant's operations. The sources said the unit was unexpectedly shut on Monday, but did not elaborate on the cause for the shutdown. Reuters, 12:04 August 31, 2016

Motiva May Delay HCU Work at Its 603,000 b/d Port Arthur, Texas Refinery to Offset Production Losses at Its 235,000 b/d Convent, Louisiana Refinery after HCU Explosion August 11 – Sources

Motiva Enterprises is considering pushing back a planned overhaul of the hydrocracking unit (HCU) at its Port Arthur, Texas refinery from late September 2016 to April 2017 in order to make up for lost production from a fire-damaged HCU at its Convent, Louisiana refinery, said sources familiar with Motiva's plans. The heavy oil HCU, damaged in an early August fire at Motiva's 235,000 b/d Convent, Louisiana refinery, could restore partial production by December, about a month earlier than previously expected, the sources said. Reuters, 12:26 August 31, 2016

LyondellBasell Reports No Impact on Operations from FCCU Insulation Fire at Its 263,776 Houston, Texas Refinery August 31

LyondellBasell Industries said operations at its Houston refinery were not affected by a small fire extinguished within 15 minutes on Wednesday. The fire was confined to insulation on the refinery's 90,000 b/d gasoline-producing fluidic catalytic cracking unit (FCCU), said Gulf Coast market sources. The fire did not affect production on the 90,000 b/d FCCU, the sources said, adding that the unit was operating above 50 percent of capacity as repairs are complete following the loss of steam and electricity supply to the refinery on August 18. The sources said, the FCCU could reach normal production within 7 days. A company spokesman also said there were no injuries from the incident.

Reuters, 15:30 August 31, 2016 Reuters, 10:59 August 31, 2016

Update: Motiva Says Shell, Saudi Aramco to Split Assets on April 1, 2017

Motiva Enterprises LLC said on Tuesday the division of its U.S. refining assets between Royal Dutch Shell Plc and Saudi Aramco would take place on April 1, 2017. The two Motiva partners announced on March 16, 2016 they would divide their 20-year-old joint venture. The split, according to sources, had been expected to take place in October 2016 after completion of negotiations between Shell and Saudi Aramco over the division of assets and compensation due the partners. The partners in March said they had signed a non-binding letter of intent under which Saudi Aramco would keep the Motiva name and the 603,000 b/d Port Arthur, Texas, refinery. Aramco would also take over 26 distribution terminals and have exclusive license to use the Shell brand for gasoline and diesel sales in Texas, the majority of the Mississippi River Valley, and the Southeast and Mid-Atlantic markets. Shell is slated to become sole owner of two Louisiana refineries with a combined capacity of 472,700 b/d and Shell-branded gasoline stations in Florida, Louisiana, and the Northeastern U.S. http://www.downstreamtoday.com/news/article.aspx?a id=53338

Buckeye Partners Launches Open Season on Its Michigan/Ohio Pipeline Expansion August 31; Project Will Reverse Portion of Its Laurel Pipeline System in Pennsylvania

Buckeye Partners on Wednesday launched a binding open season to solicit commitments for the second phase of its Michigan/Ohio pipeline expansion project. The project will offer expanded transportation service of refined petroleum products from origin points in Woodhaven and Detroit, Michigan; Toledo, Findlay and Lima, Ohio; and Midland, Pennsylvania to a destination point in the Altoona area in central Pennsylvania. Buckeye intends to reverse a portion of its existing Laurel pipeline to facilitate the transportation of refined petroleum products from Pittsburgh to central Pennsylvania. This phase of the Project is in addition to the first phase, which offered expanded transportation services from Midwestern origin points to destination points as far east as the Pittsburgh area. The open season will conclude on Oct. 14.

http://www.buckeye.com/LinkClick.aspx?fileticket=F7Btc06PKZE%3d&tabid=36

AOPL Releases Annual Liquids Pipeline Safety Excellence Performance Report, Strategic Plan August 31

The Association of Oil Pipe Lines (AOPL) on Wednesday released a new report documenting liquids pipeline safety performance and outlining industry-wide efforts to improve pipeline safety in 2016 and beyond. The 2016 API-AOPL Annual Liquids Pipeline Safety Excellence Performance Report & Strategic Plan, developed jointly by AOPL and the American Petroleum Institute (API), highlights pipeline safety trends over the last five years. The report covers transmission pipelines delivering crude oil, refined petroleum products like gasoline, diesel, jet fuel, and home heating oil, and natural gas liquids like propane and ethane used in factories and on farms. Report highlights include incidents per mile larger than 500 barrels decreased by 32 percent; 99.99 percent of crude oil and petroleum products delivered by pipeline reach their destination safely; pipeline incidents potentially impacting people or the environment outside of operator facilities are down 52 percent since 1999; corrosion caused pipeline incidents potentially impacting people or the environment outside of operator facilities are down 68 percent since 1999; 65 percent of pipeline incident releases were less than 5 barrels in 2015; 16.2 billion barrels of crude oil and petroleum products delivered by pipeline in 2014 (the most recent year data is available), a 20 percent increase since 2010; and 207,800 miles of liquids pipeline cross America delivering crude oil, refined petroleum products, and natural gas liquids, a 13 percent increase over the last 5 years. The report also outlines the specific industry-wide actions liquids pipeline operators are taking to improve pipeline safety and reduce the number of pipeline incidents. The Pipeline Safety Improvement chapter describes goals for improving pipeline safety and strategic initiatives the pipeline industry will undertake toward those goals.

http://www.aopl.org/news-public-policy/reports-2/2016-performance-report/http://www.publicnow.com/view/0F293185F4110C60DB6F86102BDB43D097BC5A33

Natural Gas

Atlas Reports HMO Shut, Flaring at Its 200 MMcf/d Driver Gas Plant in Texas August 29

Atlas reported the heat medium oil heater (HMO) shut due to flame failure. Operations immediately tried to relight heater but there were further malfunctions. The plant began its shutdown procedure to minimize emissions associated with starting up the plant when product goes off specification. This routed inlet and residue gas to the emergency flare. Technicians made repairs and the HMO was restarted. The plant was then restarted and as soon as normal operations resumed, flaring ceased.

http://www2.tceq.texas.gov/oce/eer/index.cfm?fuseaction=main.getDetails&target=242586

Other News

Nothing to report.

International News

Shell's Forcados Oil Pipeline in Nigeria Seen Restarting in Mid-September

Royal Dutch Shell Plc's Forcados pipeline in Nigeria will resume deliveries in mid-September, according to a shipper that uses the pipeline. The Forcados pipeline system is among oil infrastructure that was targeted by Nigerian militants this year. In February, Shell declared force majeure after militants blew up a line feeding the Forcados terminal, which typically exports about 200,000 b/d. Nigeria expects to pump 1.5 million b/d "at best" this year, the Minister of State for Petroleum said on August 12, after producing about 2 million b/d in 2015. http://www.bloomberg.com/news/articles/2016-08-31/shell-s-forcados-pipeline-to-restart-next-month-shoreline-says

Energy Prices

U.S. Oil and Gas Prices August 31, 2016			
	Today	Week Ago	Year Ago
CRUDE OIL West Texas Intermediate U.S. \$/Barrel	44.63	46.24	44.32
NATURAL GAS Henry Hub \$/Million Btu	2.92	2.71	2.66

Source: Reuters

Links

This Week in Petroleum from the U.S. Energy Information Administration (EIA) http://www.eia.gov/oog/info/twip/twip.asp

Updated every Wednesday.

Weekly Petroleum Status Report from EIA

http://www.eia.gov/oil_gas/petroleum/data_publications/weekly_petroleum_status_report/wpsr.html Updated after 10:30 AM & 1:00 PM ET every Wednesday.

Natural Gas Weekly Update from EIA

http://www.eia.gov/oog/info/ngw/ngupdate.asp

Updated after 2:00 PM ET every Thursday.

ENERGY ASSURANCE DAILY

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